

[Name of Document] CLAIMS

[Claim 1]

A control system comprising:

control means that controls a process apparatus, which
5 performs a predetermined process on an object to be
processed, based on information to be detected in the
process apparatus; and

alarm generation means which generates an alarm when
the detected information is off a predetermined range,

10 wherein the control means grasps a generation state of
the alarm which is generated from the alarm generation means,
and gives warning when the generation state reaches a
predetermined threshold.

[Claim 2]

15 The control system according to claim 1, wherein the
control means can set a threshold of a generation state of
an alarm which is generated from the alarm generation means,
grasps the generation state of the alarm, and gives warning
when the generation state reaches the set threshold.

20 [Claim 3]

The control system according to claim 1, wherein the
process apparatus has a plurality of detection means, and
when an alarm is generated from one detection means, the
control means automatically starts grasping the alarm
25 generation state.

[Claim 4]

The control system according to claim 1, wherein the

process apparatus has a plurality of detection means, and when an alarm is generated from a preset detection means, the control means starts grasping the alarm generation state.

[Claim 5]

5 The control system according to claim 1, wherein the alarm generation means is provided in the control means.

[Claim 6]

 The control system according to claim 1, wherein the generation state of the alarm is a number of alarm
10 generations within a predetermined time.

[Claim 7]

 The control system according to claim 1, wherein the generation state of the alarm is a time from an alarm generation to a next alarm generation.

15 [Claim 8]

 A control system comprising:

 control means that controls a plurality of process apparatuses, which perform predetermined processes on an object to be processed, based on information to be detected
20 in the process apparatuses; and

 alarm generation means which generates an alarm when the information to be detected is off a predetermined range, the control means including

 a plurality of apparatus control units that
25 respectively control the plurality of process apparatuses based on plural pieces of information to be detected in the individual process apparatuses,

a host computer that receives partial information from the individual process apparatuses and controls the individual process apparatuses based on that information, and

5 a control apparatus that receives all or nearly all information from the individual process apparatuses and controls the individual process apparatuses based on that information, the control apparatus including

10 means that collects information received from the individual control units and alarm information received from the alarm generation means,

means that analyzes the collected
15 information, and

means that grasps a generation state of the alarm generated based on the alarm information, and gives warning when the generation state reaches a predetermined threshold.

20 [Claim 9]

The control system according to claim 8, wherein the means that gives warning can set a threshold of a generation state of an alarm which is generated from the alarm generation means.

25 [Claim 10]

The control system according to claim 8, wherein the control apparatus further includes means that outputs a

result of the analysis and the generation state of the alarm.

[Claim 11]

5 The control system according to claim 8, wherein each
of the process apparatuses has a plurality of detection
means, and when an alarm is generated from one detection
means, the control apparatus automatically starts grasping
the alarm generation state.

[Claim 12]

10 The control system according to claim 8, wherein each
of the process apparatuses has a plurality of detection
means, and when an alarm is generated from a preset
detection means, the control apparatus starts grasping the
alarm generation state.

[Claim 13]

15 The control system according to claim 8, wherein the
alarm generation means is provided in the control means.

[Claim 14]

20 The control system according to claim 8, wherein the
generation state of the alarm is a number of alarm
generations within a predetermined time.

[Claim 15]

 The control system according to claim 8, wherein the
generation state of the alarm is a time from an alarm
generation to a next alarm generation.

25 [Claim 16]

 A control method that controls a process apparatus,
which performs a predetermined process on an object to be

processed, based on plural pieces of information to be detected in the process apparatus, the method comprising:

grasping a generation state of an alarm, which is generated when the detected information is off a

5 predetermined range; and

giving warning when the generation state reaches a predetermined threshold.

[Claim 17]

The control method according to claim 16, further
10 comprising setting a threshold of a generation state of the alarm which is generated when detected process information is off a predetermined range, grasping the generation state of the alarm, and giving warning when the generation state reaches the set threshold.

15 [Claim 18]

The control method according to claim 16, wherein the process apparatus has a plurality of detection means, and when an alarm is generated from one detection means, grasping the alarm generation state automatically starts.

20 [Claim 19]

The control method according to claim 16, wherein the process apparatus has a plurality of detection means, and when an alarm is generated from a preset detection means, grasping the alarm generation state starts.

25 [Claim 20]

The control method according to claim 16, wherein the generation state of the alarm is a number of alarm

generations within a predetermined time.

[Claim 21]

The control method according to claim 16, wherein the generation state of the alarm is a time from an alarm
5 generation to a next alarm generation.

[Claim 22]

A process system comprising a process apparatus which performs a predetermined process on an object to be processed, and a control system which controls the process
10 apparatus,

the control system including:

control means that controls a process apparatus, which performs a predetermined process on an object to be processed, based on information to be detected in the
15 process apparatus; and

alarm generation means which generates an alarm when the detected information is off a predetermined range,

wherein the control means grasps a generation state of the alarm which is generated from the alarm generation means,
20 and gives warning when the generation state reaches a predetermined threshold.

[Claim 23]

A process system comprising which performs a predetermined process on an object to be processed, and a
25 control system which controls the process apparatus,

the control system including:

control means that controls a plurality of process

apparatuses, which perform predetermined processes on an object to be processed, based on information to be detected in the process apparatuses; and

alarm generation means which generates an alarm when
5 the information to be detected is off a predetermined range,
the control means including

a plurality of apparatus control units that
respectively control the plurality of process
apparatuses based on plural pieces of information to be
10 detected in the individual process apparatuses,

a host computer that receives partial information
from the individual process apparatuses and controls
the individual process apparatuses based on that
information, and

15 a control apparatus that receives all or nearly
all information from the individual process apparatuses
and controls the individual process apparatuses based
on that information, the control apparatus including

means that collects information received
20 from the individual control units and alarm
information received from the alarm generation
means,

means that analyzes the collected
information, and

25 means that grasps a generation state of the
alarm generated based on the alarm information,
and gives warning when the generation state

reaches a predetermined threshold.

[Claim 24]

A computer readable storage medium containing software that allows a computer to control a process apparatus, which
5 performs a predetermined process on an object to be processed, based on plural pieces of information to be detected in the process apparatus,

wherein the software grasps a generation state of an alarm, which is generated when the detected information is
10 off a predetermined range, and gives warning when the generation state reaches a predetermined threshold.

[Claim 25]

A computer program containing software that allows a computer to control a process apparatus, which performs a
15 predetermined process on an object to be processed, based on plural pieces of information to be detected in the process apparatus,

wherein the software grasps a generation state of an alarm, which is generated when the detected information is
20 off a predetermined range, and gives warning when the generation state reaches a predetermined threshold.